

Application Number: 10/817,187  
Response Dated: September 1, 2006  
Office Action Dated: March 1, 2006

RECEIVED  
CENTRAL FAX CENTER  
SEP 01 2006

### REMARKS

This amendment is responsive to the Office Action dated March 1, 2006 for which a three (3) month response was given. Since this response is being filed on September 1, 2006, a three (3) month extension of time is believed to be due. Accordingly, attached hereto is a Petition and fee for a three (3) month extension of time. The Commissioner is hereby authorized to charge the fee associated with the attached Petition, and any other necessary fees, to Deposit Account No. 50-0959, Attorney Docket No. 089498.0477.

Claims 1 through 105 are pending in the present application upon entry of this amendment. Claims 14, 27 and 57 have been amended. Support for the amendments to claims 14, 27 and 57 can be found in the specification and claims as originally filed. Claims 99 through 105 have been added. Support for newly added claims 99 through 105 can be found in the specification and claims as originally filed. Accordingly, no new matter has been added in connection with the amendments to the claims.

Additionally, the specification and Figures 4 and 9 have been amended/revised in order to correct an inadvertent error contained therein. Support for the amendments/revisions to the specification and to Figures 4 and 9 can be found in the specification and claims as originally filed. Accordingly, no new matter has been added in connection with the amendments/revisions to the specification and to Figures 4 and 9.

In light of the above, entry and consideration of the amendments to the claims, specification and the Figures, and new claims 99 through 105, is believed due and is respectfully requested.

Applicants would also like to thank the Examiner for acknowledging the allowability of claims 1 through 13, 21 through 26, 33 through 50, and 63 through 98.

#### I. Objections to the Specification and Figures:

The Examiner has objected to the specification on the grounds that the formulas contained at: (i) page 5, lines 20 through 25; (ii) page 8, lines 25 through 30; (iii) page 16, lines 1 through 10 (Structure 6); and (iv) page 18, lines 18 through 25 (Structure 11) all appear to be technically inaccurate as they are all missing a double bond in six-member

Application Number: 10/817,187  
Response Dated: September 1, 2006  
Office Action Dated: March 1, 2006

ring portion of the molecule that contains the  $\text{BAr}^{\text{F}}_2$  group attached thereto. Additionally, Figures 4 and 9 have also been rejected for the same reason.

In response to the above objection, the specification, claims (claims 27 and 57) and the Figures (Figures 4 and 9) have been amended to correct the above-mentioned inadvertent typographical errors. In connection with the revisions to Figures 4 and 9, Replacement Sheets containing the revised Figures 4 and 9 are attached hereto.

Accordingly, given the amendments and/or revisions made to the specification, claims and Figures, the above objections to the specification and the Figures is believed to have been rendered moot, and withdrawal thereof is respectfully requested.

### III. The 35 U.S.C. § 112, Second Paragraph, Rejections:

The Examiner has rejected claims 27 through 32 and 51 through 62 under 35 U.S.C. § 112, second paragraph, as indefinite. Specifically, with regard to claims 27 and 57, the Examiner has pointed out that the formulas contained in these claims are inaccurate for the reasons set forth above in Section I of this Response. As discussed above, the formulas contained in claims 27 and 57 have been amended to correct the inadvertent typographical error contained therein. As such, the 35 U.S.C. § 112, second paragraph, indefiniteness rejection of claims 27 and 57 is believed to be moot, and withdrawal thereof is believed due and is respectfully requested.

Turning to claims 51 and 57, the Examiner contends that these claims are incomplete due to a lack of a definition for the variable R as used in the formulas contained in claims 51 and 57. With regard to this indefiniteness rejection, the Examiner's attention is directed to the disclosure contained on pages 3 and 4 of the specification as filed. As can be seen from the disclosure on pages 3 and 4, the generic structure  $\text{R}_2\text{Y}-\text{R}'-\text{YR}_2$  is defined. As would be apparent to one of ordinary skill in the art, upon reading and understanding the specification as filed, the formulas contained in claims 51 and 57 are two possible variations of the generic structure  $\text{R}_2\text{Y}-\text{R}'-\text{YR}_2$ , as disclosed at page 4 of the specification as filed. Since R' is defined in the specification, one of ordinary skill in the art would readily recognize the possibilities for R in claims 51 and 57 based

Application Number: 10/817,187  
Response Dated: September 1, 2006  
Office Action Dated: March 1, 2006

upon the possibilities for R' in the present invention's generic structure of  $R_2Y-R'-YR_2$ .

Accordingly, for at least the above reason, it is believed that claims 51 and 57 are definite in light of the specification as originally filed. As such, the 35 U.S.C. § 112, second paragraph, indefiniteness rejection of claims 51 and 57, as it relates to the variable R, is believed to be moot, and withdrawal thereof is believed due and is respectfully requested.

### III. The Provisional Rejection Under 35 U.S.C. § 101:

Claims 14 through 18 have been rejected under 35 U.S.C. § 101, provisionally. Specifically, the Examiner has pointed out that in his opinion claims 14 through 18 of the present application appear to claim subject matter that is duplicative of claims 12 through 16 of United States Patent Application No. 10/817,465 (a co-pending related patent application – hereinafter USSN 10/817,465).

In light of the above rejection, claim 12 of USSN 10/817,465 was amended to recite that the method disclosed therein is conducted in the presence of water. Since claim 14 of the present application still requires the method disclosed therein to be conducted in an organic phase or a neat monomer reaction phase, the subject matter of claims 14 through 18 of the present patent application and that of claims 12 through 16 of co-pending USSN 10/817,465 are no longer duplicative (emphasis added). As such, the provisional 35 U.S.C. § 101 rejection of claims 14 through 18 of the present patent application is believed to have been overcome, and withdrawal thereof is believed due and is respectfully requested.

### IV. The 35 U.S.C. § 102(a) Rejection:

Claims 14 and 16 through 20 have been rejected under 35 U.S.C. § 102(a) over an article to Stewart P. Lewis et al. entitled Isobutene Polymerization Using a Chelating Diborane Co-Initiator (J. Am. Chem. Soc. 2003, 125, 14686 to 14687). The article to Lewis et al. was submitted for publication on August 3, 2003.

Application Number: 10/817,187  
Response Dated: September 1, 2006  
Office Action Dated: March 1, 2006

With regard to this novelty rejection, the Examiner correctly notes that claim 14 is directed to both boron-based and aluminum-based co-initiator compounds. The Examiner argues that, given the fact that claim 14 is directed to both boron-based and aluminum-based co-initiator compounds, the subject matter of claim 14 is not entitled to the earliest priority date of April 17, 2003 based on the filing date of United States Provisional Patent Application No. 60/463,601 (hereinafter USSN 60/463,601) because the aluminum-based co-initiator compounds of claim 14 are clearly disclosed in USSN 60/463,601.

Claim 14 has been amended to remove, therefrom, aluminum as one of the choices for Y. As such, the subject matter of claim 14 is now clearly supported by the disclosure contained in USSN 60/463,601, as filed on April 17, 2003 (see page 2, lines 29 through 32 of USSN 60/463,601). Based on the clear support for amended claim 12 in the priority application, claims 14 and 16 through 20 are now entitled to an earliest priority date of April 17, 2003. As such, the article to Lewis et al. is no longer properly citable art against claims 14 and 16 through 20. Given this, the novelty rejection of claims 14 and 16 through 20 over Lewis et al. have been rendered moot, and withdrawal thereof is believed due and is respectfully requested.

**V. Conclusion:**


Accordingly, reconsideration and withdrawal of the objections to the specification, Figures and claims, as well as the 35 U.S.C. §§ 112, 101, and 102(a) rejections of the claims is believed due and is respectfully requested.

For at least the foregoing reasons, the present application is believed to be in condition for allowance, and a Notice of Allowance is respectfully requested.

Application Number: 10/817,187  
Response Dated: September 1, 2006  
Office Action Dated: March 1, 2006

Should the Examiner wish to discuss any of the foregoing in more detail, the undersigned attorney would welcome a telephone call.

Respectfully submitted,



---

Joseph J. Crimaldi, Reg. No. 41,690  
Roetzel & Andress  
222 South Main Street  
Akron, OH 44308  
Telephone: (330) 376-2700  
Facsimile: (330) 376-4577

September 1, 2006

1362261.089498.0477